

### **Property Identifiers**

Property Name: Buffalo River

Property Designation or Type: State Trail

**DNR Property Code: 9084** 

Forestry Property Code: 6212

Property Location - Counties: Buffalo, Eau Claire, Jackson, Trempealeau

Property Acreage: 508 acres

Master Plan Date: 1978; ATV use variance 1987; SNA designation variance 2002

Property Manager: Lois Larson

### **Property Assessment**

The following should be considered during the property assessment:

#### A. Ecological Landscape description and property context:

Buffalo River State Trail is located in the Western Coulee and Ridges Ecological Landscape. This ecological landscape is characterized by its highly eroded, un-glaciated topography with steep sided valleys and ridges, high gradient headwaters streams, and large rivers with extensive, complex floodplains and terraces. Many rare species have been documented here due to the diversity, scale, types, condition and context of the natural communities present. Oak forests are more abundant here than any other ecological landscape, and mesic maple-basswood forests are also widespread. All of these forest types can provide critical breeding and/or migratory habitat for significant populations of native plants and animals. Maintaining large blocks of these forest types, including areas with combinations of these types, is a major conservation opportunity. Fire-dependent oak ecosystems are well-represented in this ecological landscape, including Oak Openings, Oak Barrens, Oak Woodland, and dry to mesic oak forests.

Bedrock is mostly Paleozoic sandstones and dolomites of Cambrian and Ordovician age. Precambrian quartzite occurs in the Baraboo Hills, near the eastern edge of the ecological landscape. Thin beds of shale occur with other sedimentary rocks in some areas. Bedrock is exposed as cliffs and, more locally, as talus slopes. Soils are windblown loess of varying thickness, and alluvium in the floodplains. Organic soils, especially peats, are rare. Dendritic drainage patterns are well-developed in this mostly un-glaciated ecological landscape. Natural lakes are restricted to the floodplains of large rivers. Large, warm-water rivers are especially important here and include the Wisconsin, Chippewa, and Black. The Mississippi River forms the Ecological Landscape's western boundary. Numerous spring-fed (cold-water) headwaters streams occur here. Cool-water streams are also common.



The easternmost mile of the trail is in the Central Sand Plains Ecological Landscape. Further information on this ecological landscape can be found at this link.

Most of Buffalo River State Trail is in the Boone Valleys and Hills (222Lb05) Landtype Association (LTA). The characteristic landform pattern in this LTA is hilly summits surrounded by lower sandstone hills and narrow valleys. Soils are well-drained loamy and sandy soils with a sandy loam, silt loam, or loamy fine sand surface over non-calcareous sandy or loamy alluvium, hillslope alluvium or colluvium; some areas are over sandstone bedrock. Roughly the easternmost two miles of the trail are in two other LTAs: <a href="Eau Claire Sandstone Hills">Eau Claire Sandstone Hills</a> (222Lb02) and <a href="Fairchild Uplands">Fairchild Uplands</a> (222Rb01).

## B. General property description – management, adjacent land uses, topography, soils, etc.:

Buffalo River State Park follows a former railroad corridor. The railroad, running from Mondovi in the west to Fairchild in the east, was built between 1887 and 1890. The railroad was used strictly as a commercial line and was abandoned in 1975. The department acquired the former rail line in 1976.

The 36-mile long trail parallels US Highway 10 and the Buffalo River, crossing each several times between the western and eastern termini. In addition to passing through the municipalities of Eleva, Strum, and Osseo, the trail goes through farmland, deciduous woodlots and conifer plantations, wetlands and prairie remnants.

Soils include loams, sand and loamy sand.

After the approval of the master plan in 1978, railroad ties were removed, trestles were decked and railings were installed. Vegetation was removed as needed along the corridor, and signs were installed. The trail surface was graded and new material was added where needed. The trailheads at Mondovi and Fairchild were cleared and parking lots were established. In 2004, all of the bridges were widened and new deck boards and railings were installed. Beginning in 2009, a resurfacing project was initiated. Most of the trail between Eleva and Osseo and another section east of Osseo has been resurfaced. Routine maintenance includes grading, mowing, ditching, brushing, hazard tree removal, signage repairs and bridge maintenance.

The state natural area has received multiple prescribed burns and removal of invasive species and woody vegetation.

#### C. Current forest types, size classes and successional stages:

Note that forest reconnaissance has only been completed in Trempealeau County, reflected in the following cover types.

- **Mixed deciduous** (10%) 31 acres; date of origin 1930; hardwood poles; dominated by box elder.
- Red pine (4%) 11 acres; dates of origin 1960, 1991; softwood poles to softwood small sawlogs; plantations; dominated by red pine and white pine.
- **Red maple** (3%) 10 acres; date of origin 1970; hardwood poles; dominated by red maple.
- Central hardwoods (3%) 8 acres; date of origin 2000; seedlings and saplings.
- Other types (81%) 256 acres; state trail.

# D. NHI: Endangered, threatened, Special Concern species, Species of Greatest Conservation Need (SGCN):

One rare plant species (special concern) was historically documented in the vicinity of Buffalo River State Trail. Four rare animal species (one threatened, three special concern) have been documented in or within two miles of the trail. Of these animals, one is a Species of Concern and a second is listed as federally endangered.



## E. Wildlife Action Plan Conservation Opportunity Areas (COA), Important Bird Areas (IBA):

The trail is not in a COA or IBA.

#### F. Significant cultural or archeological features:

No specific areas of concern were identified.

#### G. Invasive species:

Buckthorn, honeysuckle, spotted knapweed, leafy spurge, and sweet clover have been noted

# H. Existing State Natural Areas (SNA) designations/natural community types limited in the landscape:

One SNA is designated: Buffalo River Trail Prairies SNA which contains four high-quality prairie remnants located along the Buffalo River State Trail. The four prairie remnants stretch between Eleva and Osseo. One is located west of Eleva, two are east of Strum and the largest (a five-mile stretch) is east of Osseo. The prairies contain numerous species including big and little blue-stem, stiff goldenrod, prairie coreopsis, spiderwort and flowering spurge. The SNA is managed as a dry-mesic prairie reserve and as an ecological reference area. Native prairie species are managed actively through tree/shrub control using tree harvest, brushing and especially fire to mimic natural disturbance patterns. Other allowable activities include control of invasive plants and animals, augmentation of native prairie species after careful review, maintenance of existing facilities and access to suppress wildfires.

#### I. Primary public uses:

The trail is open to hiking and biking, ATV and UTV use, horseback riding, snowmobiling, cross-country skiing, and snowshoeing. The trail may bring a number of different users to the trail at the same time. The Buffalo River State Trail corridor is open to hunting from Mondovi to Fairchild, approximately 36 miles, during the Wisconsin state parks hunting time frame.

- J. Biotic Inventory status: None
- K. Deferral/consultation area designations: None

#### **IFMP** components

### **Management Objectives:**

From 1978 master plan:

VII. Goal and Objectives

- B. Objectives
  - 3. To enhance the view of the surrounding landscape from the trail by the cutting and management of brush and trees which have invaded the trail right-of-way.
- C. Management
  - 1. Facility management: "...tree and brush removal...to insure a safe and enjoyable trail experience."
  - 2. Vegetative management: Landscape management techniques will be used to insure an aesthetically pleasing trail...pruning and thinning will occur.

From the 2014 Wisconsin State Park System Conifer Management variance:



Invasive species will be managed using appropriate techniques. Park staff will consult the restricted/prohibited species lists in NR40 to help prioritize invasive species management.

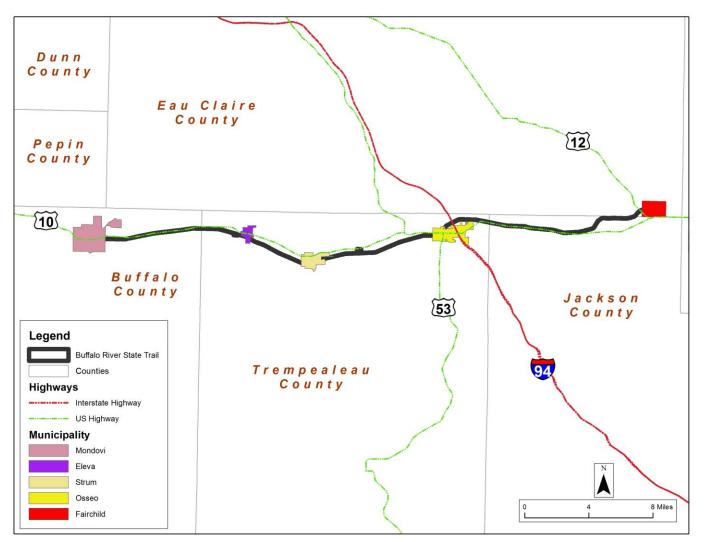
#### **Property Prescriptions**

- Establish, where needed, and maintain vistas through woody vegetation including pruning, thinning and cutting trees and brush. A commercial timber sale can be used if volume is sufficient.
- Control invasive plant species using accepted practices including mechanical, manual, chemical, and biological control methods such as prescribed fire.
- Manage hazard trees per department standards. Ash trees in use areas that may be affected by emerald ash borer may be managed prior to infestation. If volume is sufficient, commercial timber sales may be used for hazard tree removal.

Summary of Public Involvement and Comments Received

Maps (Optional)	
a. Property Locator Map	
PREPARED BY:	
Property Manager	Date
APPROVED:	
Area Program Supervisor	Date
REVIEWED BY:	
Forester	Date Date
District Ecologist	 Date





a. Locator map for Buffalo River State Trail